New Balance Athletic Shoe
Oxford County
Norway, Maine
A-814-71-B-R

Departmental
Findings of Fact and Order
Air Emission License

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

New Balance Athletic Shoe (New Balance) located in Norway, Maine has applied to renew their Air Emission License permitting the operation of emission sources associated with their shoe manufacturing facility.

B. Emission Equipment
The following equipment is addressed in this air emission license:

Fuel Burning Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type	Stack #
Boiler #1*	4.2	30.0	#2 fuel oil	1

*Previously Boiler #1 was listed as 6.3 MMBtu/hr. New Balance replaced that boiler with a new 4.2 MMBtu/hr boiler.

Process Equipment

Equipment	Pollution Control Equipment
Shoe Manufacturing Equipment	none

C. Application Classification

The application for New Balance does not include the licensing of increased emissions. Therefore, the license is considered to be a renewal and has been processed through Chapter 115 of the Department's regulations.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Department's regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boiler #1

Boiler #1 is used for facility heating. The boiler was installed in 2004 with a maximum heat input of 4.2 MMBtu/hr and is therefore not subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units greater than 10 MMBtu/hr manufactured after June 9, 1989.

A summary of the BACT analysis for Boiler #1 (4.2 MMBtu/hr) is the following:

1. The total fuel use for Boiler #1 shall not exceed 50,000 gal/year of #2 fuel oil based on a 12 month rolling total.
2. The SO_2 emission limits are based on the firing of fuel which meets the criteria in ASTM D396 for #2 fuel oil.
3. Chapter 103 regulates PM emission limits. The PM_{10} limits are derived from the PM limits.

4. NO_x emission limits are based on data from similar #2 fired boilers of this size and age.
5. CO and VOC emission limits are based upon AP-42 data dated 9/98.
6. Visible emissions from Boiler #1 shall not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period.

C. Process Emissions

New Balance manufactured athletic shoes using a combination of automation and handmade processes at the Norway facility. New Balance no longer assembles shoe components, but rather receives components, which are then formed and fitted together to finish the shoe.

Two different types of technology are utilized, Solvent and Hot Melt. There are 14 Solvent stations and 13 Hot Melt stations.

In the Solvent technology process adhesive is applied to the upper and allowed to dry. The uppers are heated to activate the adhesive and aligned and pressed with the soles. Touch-up repairs are made as the last step.

In the Hot Melt technology process the soles are sprayed with a very fine mist of low VOC Hot Melt adhesive. The upper is washed in a steamer. No chemicals are utilized in this step. The sole is activated, aligned, and pressed with the upper. Touch-up repairs are made.

The majority of emissions from the facility are generated through the use of solvent based materials in the Solvent technology process. The use of solvent based cements necessitates the use of solvent based cleaners to remove cement residues. New Balance is in the process of switching several Solvent stations over to Hot Melt stations.

To document emissions from the facility, New Balance will continue to maintain the current record keeping program. This program consists of monitoring material usage and production rates, a monthly inventory of materials purchased, and the determination of VOC emissions of pounds of VOC emitted per unit product produced on a monthly basis.

D. Annual Emissions

New Balance shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Licensed Annual Emission for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	**PM_{10}**	**SO_2**	**NO_x**	**CO**	**VOC**	**Total HAP**
Boiler #1	0.3	0.3	1.8	1.1	0.1	--	--
Process Emissions	--	--	--	--	--	10.0	9.0
Total TPY	**0.3**	**0.3**	**1.8**	**1.1**	**0.1**	**10.0**	**9.0**

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling and monitoring are not required for a renewal if the total emissions of any pollutant released do not exceed the following:

Pollutant	**Tons/Year**
PM	25
PM_{10}	25
SO_2	50
NO_x	100
CO	250

Based on the above total facility emissions, New Balance is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-814-71-B-R subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [MEDEP Chapter 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [MEDEP Chapter 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [MEDEP Chapter 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [MEDEP Chapter 115]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [MEDEP Chapter 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [MEDEP Chapter 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [MEDEP Chapter 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [MEDEP Chapter 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [MEDEP Chapter 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
   1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
   2. pursuant to any other requirement of this license to perform stack testing.

B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.

[MEDEP Chapter 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[MEDEP Chapter 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [MEDEP Chapter 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [MEDEP Chapter 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [MEDEP Chapter 115]

SPECIFIC CONDITIONS

(16) **Boiler #1**

A. Total fuel use for Boilers #1 shall not exceed 50,000 gal/yr of #2 fuel oil. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use shall be kept on a 12-month rolling total basis. [MEDEP Chapter 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.08	MEDEP Chapter 115, BACT

C. Emissions shall not exceed the following [MEDEP Chapter 115, BPT]:

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.34	0.34	2.12	1.26	0.15	0.01

D. Visible emissions from Boiler #1 shall not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [MEDEP Chapter 101]

(17) **Process Emissions**

A. Total VOC emissions from the facility shall not exceed 10.0 ton/year on a 12 month rolling total basis. [MEDEP Chapter 115, BPT]

B. Total emissions of HAP (as listed in Section 112(b) of the Clean Air Act) shall not exceed 9.0 ton/year on a 12 month rolling total basis. [MEDEP Chapter 115, BPT]

C. New Balance shall record the amount of VOC emitted per unit of product produced on a monthly basis using the following procedures [MEDEP Chapter 115, BPT]:

1. The pounds of VOC emissions are calculated by recording the VOC content (i.e. lb/gal) of all material issued and by recording the amount

(i.e. gallons) of VOC containing material issued at the facility. New Balance shall maintain records of the following:

a. Beginning of month facility storage inventory
b. Monthly facility purchases
c. End of month facility storage inventory

VOC emissions from New Balance shall be defined as follows, based on the information gathered from A through C above:

Monthly VOC Emissions = (A x VOC content) + (B x VOC content) – (C x VOC content)

At New Balance's discretion, quantities of VOC shipped off-site with waste may be quantified and subtracted from the monthly VOC emissions.

2. New Balance shall record the total amount of footwear produced on a monthly basis, to be expressed as the total number of pairs of soles and shoes produced, based on product shipment and storage records.
3. The lbs VOC emitted per unit product produced shall be calculated by dividing (1) by (2) above, on a calendar month and 12 month rolling average basis.

D. New Balance shall maintain standard operating and maintenance procedures (SOMP) to minimize VOC & HAP losses, and maintain these procedures at the appropriate locations within the facility. These procedures are as follows [MEDEP Chapter115, BPT]:

1. A procedure to minimize the volatilization of solvents during the measuring of VOC containing material and/or mixing of VOC containing material.
2. A procedure to minimize VOC fugitive losses from the chemical and solvent storage rooms. Procedures should include methods of securely sealing containers and methods to clean up accidental spills.
3. A procedure to minimize solvent usage or VOC losses during equipment cleanup and during transport (including the transferring of chemicals from the mixing areas to the production lines).

(18) New Balance shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605).

(19) **Air Toxics Emission Statement**

If New Balance exceeds the thresholds for HAPs listed in Appendix A of MEDEP Chapter 137 in an inventory year, in accordance with MEDEP Chapter 137 the licensee shall report, no later than July 1 every three years (2005, 2008, 2011, etc.) or as otherwise stated in Chapter 137, the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions on the Air Toxics emissions inventory portion should be directed to:

Attn: Toxics Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

(20) **Payment of Annual License Fee**

New Balance shall pay the annual air emission license fee within 30 days of September 30th of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
DAVID P. LITTELL, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 9/22/06
Date of application acceptance: 9/22/06

Date filed with the Board of Environmental Protection: _____

This Order prepared by Lynn Ross, Bureau of Air Quality.